

## North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 182

Reporting Period: Apr 08 - Feb 10

All Trips Combined

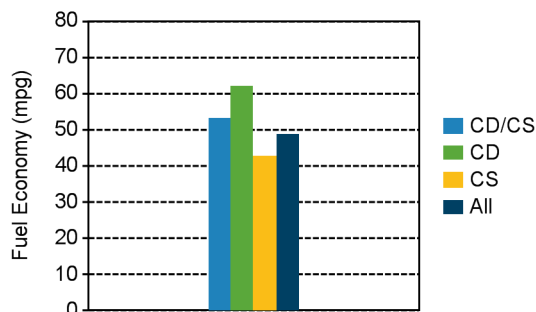
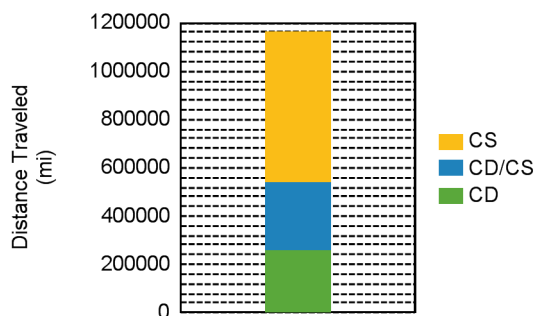
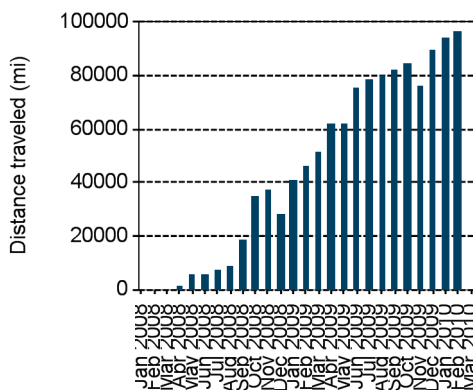
Overall gasoline fuel economy (mpg)	49
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	59
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	43
Total number of trips	125,328
Total distance traveled (mi)	1,161,489
Trips in Charge Depleting (CD) mode <sup>3</sup>	
Gasoline fuel economy (mpg)	62
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	140
Number of trips	57,053
Percent of trips city / highway	86% / 14%
Distance traveled (mi)	261,411
Percent of total distance traveled	23%
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes <sup>5</sup>	
Gasoline fuel economy (mpg)	53
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	49
Number of trips	10,749
Percent of trips city / highway	47% / 53%
Distance traveled (mi)	278,541
Percent of total distance traveled	24%
Trips in Charge Sustaining (CS) mode <sup>7</sup>	
Gasoline fuel economy (mpg)	43
Number of trips	57,526
Percent of trips city / highway	74% / 26%
Distance traveled (mi)	625,034
Percent of total distance traveled	54%
Number of trips when the plug-in battery pack was turned off by the vehicle operator <sup>8</sup>	3194
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) <sup>9</sup>	103,635

## Vehicle Technologies Program

Date range of data received:

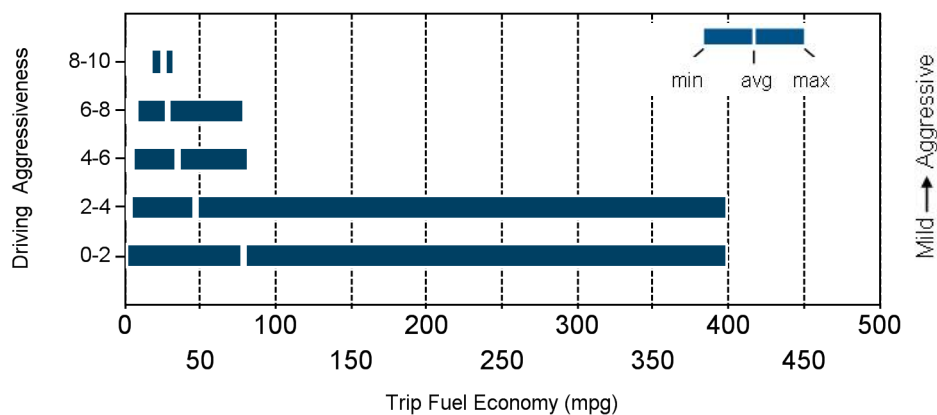
4/18/2008 to 2/28/2010

Number of days the vehicles were driven: 675

**Gasoline Fuel Economy By Trip Type****Distance Traveled By Trip Type****Miles Logged by Month This Year**Notes: 1 - 9. Please see <http://avt.inel.gov/phev/reportnotes> for an explanation of all PHEV Fleet Testing Report notes.

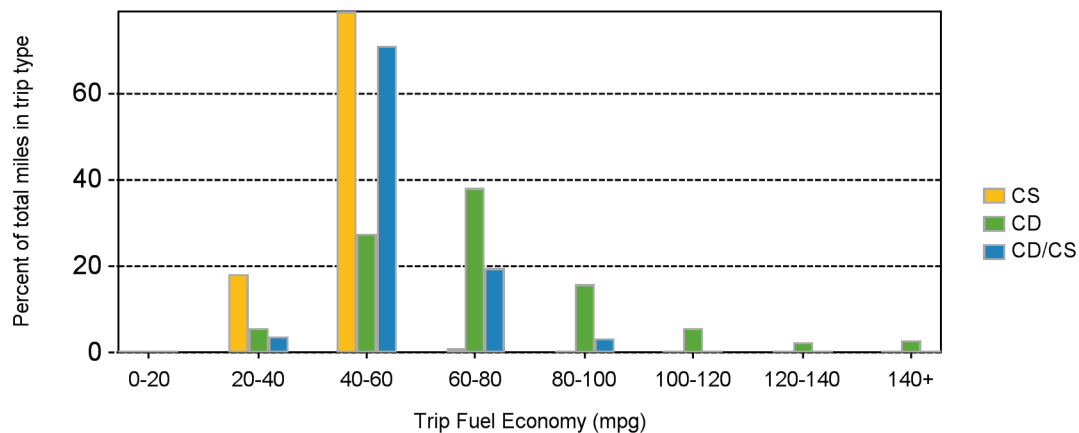
Trips in Charge Depleting (CD) mode			City	Highway
Gasoline fuel economy (mpg)			60	66
DC electrical energy consumption (DC Wh/mi)			165	109
Percent of miles with internal combustion engine off			29%	10%
Average trip aggressiveness (on scale 0 - 10)			1.7	1.7
Average trip distance (mi)			3.0	14.4
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes				
Gasoline fuel economy (mpg)			55	53
DC electrical energy consumption (DC Wh/mi)			80	44
Percent of miles with internal combustion engine off			24%	6%
Average trip aggressiveness (on scale 0 - 10)			1.8	1.6
Average trip distance (mi)			8.6	40.9
Trips in Charge Sustaining (CS) mode				
Gasoline fuel economy (mpg)			37	45
Percent of miles with internal combustion engine off			22%	5%
Average trip aggressiveness (on scale 0 - 10)			1.8	1.7
Average trip distance (mi)			3.6	31.8

**Effect Of Driving Aggressiveness on Fuel Economy This Year**



Aggressiveness factor is based on accelerator pedal position. The more time spent during a trip at higher accelerator pedal position, the higher the trip aggressiveness.

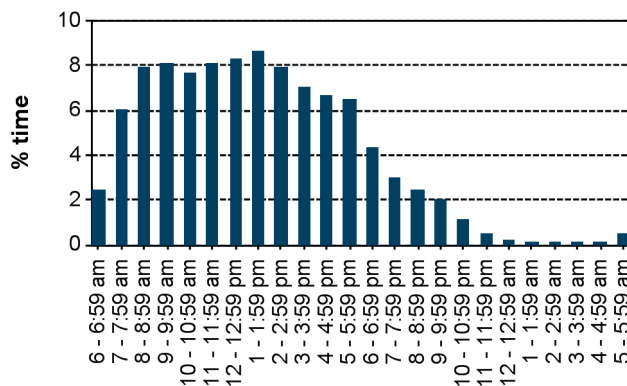
**Trip Fuel Economy Distribution By Trip Type**



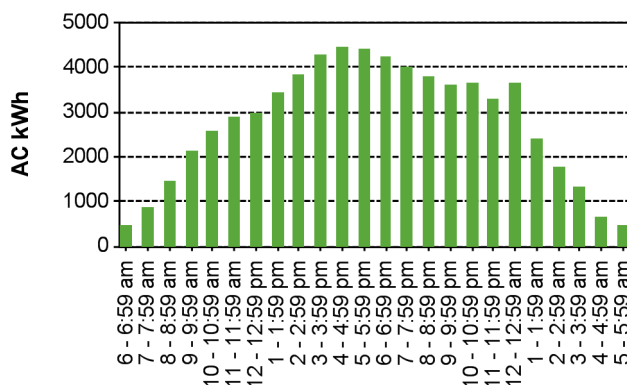
## Plug-in charging

Average number of charging events per vehicle per month when driven	14
Average number of charging events per vehicle per day when vehicle driven	1.0
Average distance driven between charging events (mi)	44.8
Average number of trips between charging events	4.8
Average time plugged in per charging event (hr)	20.9
Average time charging per charging event (hr)	2.8
Average energy per charging event (AC kWh)	2.6
Average charging energy per vehicle per month (AC kWh)	37.1
Total number of charging events	25,928
Total charging energy (AC kWh)	67,996

**Time of Day When Driving**



**Time of Day When Charging**



**Time of Day When Plugging In**

